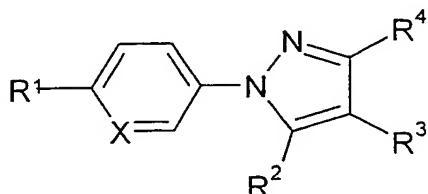


Patent Claims

1. Use of the compounds of the formula I

5



10

in which

X denotes CH or N,

15

R^1 denotes H, A, Hal, $(CH_2)_n$ Het, $(CH_2)_n$ Ar, cycloalkyl having 3 to 7 C atoms, CF_3 , NO_2 , CN, $C(NH)NOH$ or OCF_3 ,

15

R^2 denotes $(CH_2)_n$ Het, $(CH_2)_n$ Ar, cycloalkyl having 3 to 7 C atoms or CF_3 ,

20

R^3, R^4 denote H, $(CH_2)_nCO_2R^5$, $(CH_2)_nCOH$ et, $(CH_2)_nCON(R^5)_2$, $(CH_2)_nCOO(CH_2)_n$ Het, CHO, $(CH_2)_nOR^5$, $(CH_2)_n$ Het, $(CH_2)_nN(R^5)_2$, $CH=N-OA$, $CH_2CH=N-OA$, $(CH_2)_nNHOA$,

25

$(CH_2)_nN(R^5)$ Het, $(CH_2)_nCH=N$ -Het, $(CH_2)_nOCOR^5$,

$(CH_2)_nN(R^5)CH_2CH_2OR^5$, $(CH_2)_nN(R^5)CH_2CH_2OCF_3$,

$(CH_2)_nN(R^5)C(R^5)HCOOR^5$, $(CH_2)_nN(R^5)CH_2COH$ et,

$(CH_2)_nN(R^5)CH_2$ Het, $(CH_2)_nN(R^5)CH_2CH_2$ Het,

$(CH_2)_nN(R^5)CH_2CH_2N(R^5)CH_2COOR^5$,

$(CH_2)_nN(R^5)CH_2CH_2OR^5$, $(CH_2)_nN(R^5)CH_2CH_2N(R^5)_2$,

$CH=CHCOOR^5$, $CH=CHCH_2NR^5$ Het, $CH=CHCH_2N(R^5)_2$,

$CH=CHCH_2OR^5$, $CH=CHCH_2$ Het, $(CH_2)_nN(R^5)$ Ar,

$(CH_2)_nN(COOR^5)COOR^5$, $(CH_2)_nN(CONH_2)COOR^5$,

$(CH_2)_nN(CONH_2)CONH_2$, $(CH_2)_nN(CH_2COOR^5)COOR^5$,

$(CH_2)_nN(CH_2CONH_2)COOR^5$, $(CH_2)_nN(CH_2CONH_2)CONH_2$,

$(CH_2)_nCHR^5COR^5$, $(CH_2)_nCHR^5COOR^5$,

30

$(CH_2)_nCHR^5CH_2OR^5$, where in each case one of the radicals R^3 or R^4 has the meaning H,

35

5 R⁵ denotes H or A

10 A denotes straight-chain or branched alkyl or cycloalkyl having 2 to 4 C atoms, having 1 to 10 C atoms, alkenyl having 2 to 10 C atoms, alkoxyalkyl having 2 to 10 C atoms or cycloalkyl having 4 to 7 C atoms, each of which is unsubstituted or substituted by Hal or CN,

15 Het preferably denotes a saturated, unsaturated or aromatic mono- or bicyclic heterocyclic radical having 1 to 15 C atoms which is unsubstituted or mono- or polysubstituted by A and/or Hal or a linear radical having 1 to 15 C atoms containing one or two hetero atoms,

20 Ar denotes a phenyl radical which is unsubstituted or mono- or polysubstituted by A and/or Hal, OR⁵, OOCR⁵, COOR⁵, CON(R⁵)₂, CN, NO₂, NH₂, NHCOR⁵, CF₃ or SO₂CH₃,

25 n denotes 0, 1, 2, 3, 4 or 5

30 and

35 Hal denotes F, Cl, Br or I,

40 and salts and solvates, enantiomers and racemates thereof for the preparation of a medicament for the treatment and prophylaxis of diseases which can be influenced by the binding of the compounds of the formula I to 5 HT receptors.

45 2. Use of compounds according to Claim 1 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament having a 5-HT receptor-antagonistic action.

50 3. Use of compounds according to Claim 1 or 2 and/or physiologically acceptable salts and solvates thereof for the preparation of a medicament having a 5-HT_{2A} receptor-antagonistic action.

4. Use of compounds of the formula I according to Claim 1, 2 or 3 and/or physiologically acceptable salts or solvates thereof for the preparation of a medicament for the prophylaxis and/or treatment of psychoses, neurological disorders, amyotrophic lateral sclerosis, eating disorders, such as bulimia, anorexia nervosa, of premenstrual syndrome and/or for positively influencing obsessive-compulsive disorder (OCD).
5. Use of the compounds of the formula I according to one or more of the preceding claims, in which R¹ denotes phenyl, 2-, 3- or 4-cyano-phenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-, 3,4-, 3,5- or 3,6-difluoro-, di-chloro- or dicyanophenyl, 3,4,5-trifluorophenyl, 3,4,5-trimethoxy- or triethoxyphenyl, thiophen-2-yl or thiophen-3-yl or 1-, 2- or 3-pyrrolyl.
10. Use of the compounds of the formula I according to one or more of the preceding claims, in which R³ denotes (CH₂)_nCO₂R⁵, (CH₂)_nCO-Het, CHO, CH₂OR⁵, (CH₂)_n-Het, (CH₂)_nN(R⁵)₂ or CH=N-OA, (CH₂)_nN(R⁵)Het, (CH₂)_nN(R⁵)CH₂CH₂OR⁵, (CH₂)_nN(R⁵)CH₂Het, (CH₂)_nN(R⁵)CH₂CH₂Het, (CH₂)_nN(R⁵)CH₂CH₂N(R⁵)₂, CH=CHCH₂NR⁵Het, CH=CHCH₂N(R⁵)₂, CH=CHCH₂OR⁵, CH=CHCH₂Het or (CH₂)_nN(R⁵)Ar.
15. Use of the compounds of the formula I according to one or more of the preceding claims, in which R⁴ denotes H.
20. Use of the compounds of the formula I according to one or more of the preceding claims, in which R² denotes phenyl, 2-, 3- or 4-cyano-phenyl, 2-, 3- or 4-fluorophenyl, 2-, 3- or 4-methyl-, ethyl-, n-propyl- or n-butylphenyl, 2,3-, 2,4-, 2,5-, 2,6-difluoro- or dicyanophenyl, thiophen-2-yl or thiophen-3-yl, 2-, 3- or 4-pyridyl, 2-, 4- or 5-oxazolyl, 2-, 4- or 5-thiazolyl, quinolinyl, isoquinolinyl, 2- or 4-pyridazyl, 2-, 4- or 5-pyrimidyl, 2- or 3-pyrazinyl, 2- or 3-furyl.
25. Use of the compounds of the formula I according to one or more of the preceding claims, in which X has the meaning CH.
30. Use of the compounds of the formula I according to one or more of the preceding claims, in which X has the meaning CH.
35. Use of the compounds of the formula I according to one or more of the preceding claims, in which X has the meaning CH.

10. Use of the compounds of the formula (a) to (o) according to Claim 1:
[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]- (a)
(4-methylpiperazin-1-yl)amine

5 4-{2-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl]- (b)
ethyl}morpholine

10 4-{3-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4- (c)
yl]allyl}morpholine

15 1-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (d)
methyl]pyrrolidin-3-ol

20 1-[1-(4'-fluorobiphenyl-4-yl)-5-(2-fluorophenyl)-1H-pyrazol- (e)
4-ylmethyl]-4-methylpiperazine

25 1-[5-(2-fluorophenyl)-1-(4-thiophen-3-ylphenyl)-1H-pyrazol-4-yl- (f)
methyl]-4-methylpiperazine

30 N¹-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (g)
methyl]ethane-1,2-diamine

35 2-{[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (i)
methyl]amino}ethanol

[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]- (j)
(2-methoxyethyl)amine

2-{[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (k)
methyl]methylamino}ethanol

1-[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-yl- (l)
methyl]-4-methyl-[1,4]diazepam

1-[1-(4'-fluorobiphenyl-4-yl)-5-phenyl-1H-pyrazol-4-yl- (m)
methyl]-4-methylpiperazine

1-[5-(2-fluorophenyl)-1-(4-pyrrol-1-ylphenyl)-1H-pyrazol-4- (n)
ylmethyl]-4-methylpiperazine

[1-biphenyl-4-yl-5-(2-fluorophenyl)-1H-pyrazol-4-ylmethyl]- (o)
methyl-(1-methylpyrrolidin-3-yl)amine

and salts and solvates thereof.